Testimony of

Dr. Martin Blume

Deputy Director Brookhaven National Laboratory

before the

Senate Energy and Natural Resources Committee

Wednesday June 26, 1996

the base for patient care, traveling to islands where the patients lived. (This year the Department of Energy decided that, in order to improve treatment capability at a lower cost, care would be based at hospitals in Kwajalein and Majuro, although only Kwajalein was used.) After 1972 a resident physician based in the Marshall Islands provided medical treatment to the covered population in the period between missions. At the time the Compact of Free Association between the United States and the Republic of the Marshall Islands came into effect, about ten years ago, the resident physician in the RMI was no longer provided as part of the DOE program. Care during the period between missions is now provided by the health care program established under section 177 of the Compact of Free Association. Cases requiring more care than is available during the missions are handled by referrals to other locations. At present the Straub Clinic in Honolulu treats most of these cases.

In spite of the decrease of patient numbers, the requirements for care have in fact increased over the years. This is due to several factors, including the well known increase in needs for aging populations, increased requirements for record keeping and quality assurance (the Brookhaven program is accredited, with distinction, by the Joint Commission on Accreditation of Healthcare Organizations) and by greater use of medical technology, such as ultrasound scanning devices for thyroid anomalies. Unfortunately the resources available to Brookhaven for this program have decreased. There is only a single half-time physician (compared with two full time physicians 15 years ago) funded by the DOE, and the support staff has been decreased as well. The total budget provided to Brookhaven is about \$1 million per year, with additional funds going to contractors for logistical support. I believe

in the United States (and elsewhere) who are better qualified to manage such an undertaking.

I believe that a full reconsideration of the U.S. contributions to Marshallese medical care is warranted before deciding on additions to or subtractions from the current programs. Full involvement of representatives of the Republic of the Marshall Islands is essential in coming to an understanding of their needs and requirements. Financing is certain to be an important issue, so a reasonably accurate estimate of the costs of all programs that are considered is essential. I commend the Committee for undertaking this process and look forward to working with you and our Marshallese friends and colleagues in helping to define a program that is just, responsible, and assures excellence of medical care.

Addendum: Radiation Monitoring Programs in the Marshall Islands

In addition to medical care the Department of Energy also funds two monitoring programs in the Republic of the Marshall Islands. One, for environmental monitoring, is carried out by Lawrence Livermore National Laboratory, and the second, involving personnel monitoring, is the responsibility of Brookhaven National Laboratory. They are aimed at establishing baseline levels of residual radiation in the environment in the first case and of body burdens of individuals who have lived or are living in potentially contaminated environments in the second. It is important to distinguish these programs from the medical care that is the subject of today's hearings. The expertise for such monitoring is certainly present in the Department of Energy's National Laboratories, and this important effort is appropriately placed with them.

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Mr. Chairman, distinguished members of the Committee, Ladies and Gentlemen: I am Martin Blume, Deputy Director of Brookhaven National Laboratory. I greatly appreciate the opportunity to testify on S. 1804, amendment 4039. This amendment would extend to the people of Bikini and Enewetak the medical care now provided under the auspices of the Department of Energy to those residents of Rongelap, Ailingnae, and Utirik atolls who were exposed to high doses of radiation as a result of fallout from the "Bravo" nuclear weapons test of March 1954.

Background of the Brookhaven-DOE Medical Care Program

In order to discuss the appropriateness of extending the Department of Energy radiation effects monitoring and treatment to the provision of general health care for a large (about 3000 people) population it is important to consider the background and context of the DOE's Brookhaven program. Brookhaven physicians and support staff have since 1956 provided medical care to the Marshallese for the Atomic Energy Commission and its successor agencies, including the Department of Energy. Originally 253 people exposed to fallout were included in those covered, and of these, after forty years, 134 remain. In addition, care was provided for a "comparison" group that totaled, over the years, about 227 individuals. At present about 105 individuals are treated as part of this group, so that the total patient load numbers about 239. The patients are provided, under law, with care only for "radiation related" illnesses, defined as any cancer or thyroid related problem. The physicians do, however, provide such other care as is warranted when problems are uncovered during examinations. Examinations and treatment for the covered population take place in two "missions" of about a month's duration each year. Until this year a ship was used as

the base for patient care, traveling to islands where the patients lived. (This year the Department of Energy decided that, in order to improve treatment capability at a lower cost, care would be based at hospitals in Kwajalein and Majuro, although only Kwajalein was used.) After 1972 a resident physician based in the Marshall Islands provided medical treatment to the covered population in the period between missions. At the time the Compact of Free Association between the United States and the Republic of the Marshall Islands came into effect, about ten years ago, the resident physician in the RMI was no longer provided as part of the DOE program. Care during the period between missions is now provided by the health care program established under section 177 of the Compact of Free Association. Cases requiring more care than is available during the missions are handled by referrals to other locations. At present the Straub Clinic in Honolulu treats most of these cases.

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that \$1.5 million per year is needed to provide adequate resources as well as additional personnel. In particular another half-time physician as well as a physician's assistant or nurse-practitioner are required for a properly supported program that will continue to be accredited. We have managed to continue to provide excellent care to the Marshallese by using volunteer physicians (who are accredited by the Brookhaven Clinical facility and who provide specialty expertise such as gynecology and radiology) on each of the missions.

Conclusions with Respect to Amendment 4039

Several conclusions concerning amendment 4039 follow from the description of the program above:

- 1) The DOE/Brookhaven medical care effort is different from and on a much smaller scale than the proposed addition of Enewetak and Bikini populations. It is specialized to the treatment of radiation induced illnesses and is not suited, logistically or medically, to a general health care program.
- 2) The costs are likely to be high for such an extension because of the special requirements of the aging population now covered under the Brookhaven program. There are already financial problems associated with both existing health care programs that would be exacerbated by the addition of the 3000 Bikini and Enewetak populations.
- 3) A National Laboratory is not the appropriate institution to undertake management of such a general health care program, as opposed to the specialized small scale effort for which Brookhaven has been responsible. There are many health care providers in the private sector

in the United States (and elsewhere) who are better qualified to manage such an undertaking.

I believe that a full reconsideration of the U.S. contributions to Marshallese medical care is warranted before deciding on additions to or subtractions from the current programs. Full involvement of representatives of the Republic of the Marshall Islands is essential in coming to an understanding of their needs and requirements. Financing is certain to be an important issue, so a reasonably accurate estimate of the costs of all programs that are considered is essential. I commend the Committee for undertaking this process and look forward to working with you and our Marshallese friends and colleagues in helping to define a program that is just, responsible, and assures excellence of medical care.

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Again, thank you for the opportunity to testify this morning. I will be happy to answer questions.

BIOGRAPHICAL NOTE

Martin Blume is Deputy Director of Brookhaven National Laboratory, Upton, NY. He received his bachelor's degree from Princeton and his Ph.D. in theoretical physics from Harvard. He has been at Brookhaven since 1962 and was appointed Deputy Director in 1984. He received the E.O. Lawrence Award for his research in theoretical solid state physics and was elected to the American Academy of Arts and Sciences.